

REMARKS/ARGUMENTS

Claims 1, 2 and 12 were rejected under 35 USC 102(b) as being anticipated by Vaux (US patent number 4,991,834).

The examiner stated:

Vaux discloses a mat comprising a mat base having a top surface and a bottom surface, a plurality of long legs perpendicularly attached to the bottom surface of the mat base which is deemed to be for resiliently supporting the mat base and a plurality of short legs perpendicularly attached to the bottom surface of the mat base deemed to be for supporting the mat base and modifying the resiliency of the mat. Also, the long legs and the short legs are deemed capable of providing a selected mat compression when a load is applied to the top surface of the mat, since the mat comprises the claimed long and short legs. The mat further comprises a plurality of ribs wherein each rib connects a pair of legs and wherein the length perpendicular to the mat of each rib is approximately the length of the legs to which it is attached, but not longer than either of the legs to which it is attached. (Specification references omitted).

Claims 2 and 12 are dependent claims which depend upon claim 1. Claim 1 has been amended as follows:

1. (Currently amended) A flexible rubber mat comprising:

- (a) a mat base having a top surface and a bottom surface;
- (b) a plurality of long legs perpendicularly attached to the bottom surface of the mat base for resiliently supporting the mat base on a floor; and
- (c) a plurality of short legs perpendicularly attached to the bottom surface of the mat base for supporting the mat base on a floor and modifying the resiliency of the mat, wherein the long legs and the short legs are adapted to provide a selected mat compression when a load is applied to the top surface of the mat such that the mat compresses as if it were constructed from a softer material.

Support for the mat being a flexible rubber mat can be found within paragraphs 31-33 of the application specification. Two of the definitions of rubber contained within the American Heritage dictionary, third edition are "a yellowish, amorphous, elastic material obtained from the milky sap or latex of various tropical plants, especially the rubber tree, and vulcanized, pigmented, finished and modified into products such as electric insulation, elastic bands and belts, tires and containers... Any of numerous synthetic elastic materials of varying chemical composition with properties similar to those of natural rubber." Elastic is defined as "easily resuming original shape after being stretched or expanded; flexible." Support for the legs providing support on the floor can be found within paragraphs 32-34 and Figures 3, 4, 5a, 5b and 5c. Support for the limitation "such that the mat compresses as if it were constructed from a softer material" can be found within paragraphs 32 and 33.

Vaux does not disclose a combination of long legs and short legs supporting a mat base. Vaux also fails to disclose long legs and short legs which are adapted to provide a selected mat compression. Any resiliency modification provided by the bottom surface structures of Vaux are

random and arbitrary. In this invention the long legs and short legs are sized and shaped such that they are adapted to provide a selected mat compression when a load is applied to the top surface of the mat such that the mat compresses as if it were constructed from a softer material.

A review of column 7, lines 49-62 and Figures 4B, 4C and 6A of Vaux shows that Vaux does not have long legs and short legs, but rather only legs of one length. A cylindrical rib 23 defines an air filled cell 22. Although the air filled cell 22 may be considered a leg it has only one length and is clearly not a combination of a long leg and a short leg.

Claim 2 of applicant specifically references three structures – long legs, short legs and ribs. As can be seen from Figure 4C of Vaux, the bottom surface of Vaux contains at most two support structures. These are the air filled cells 22 and possibly the median ribs 27. Therefore, applicant's three plus structure claim of claim 2 cannot read on a two structure disclosure of Vaux.

One of the objects of the invention described in claim 1 is to provide a mat which may be manufactured from hard rubber for durability, yet feel compressive and resilient when stepped upon. See application paragraph 7. Claim 1 provides that "the long legs and the short legs are adapted to provide a selected mat compression when a load is applied to the top surface of the mat such that the mat compresses as if it were constructed from a softer material." Neither Vaux nor Taylor (US patent number 2,810,672) have as an object the provision of a selected mat compression when a load is applied to the top surface of the mat such that the mat compresses as if it were constructed from a softer material. Also, neither Vaux nor Taylor coincidentally satisfy these limitations. Neither provides a selected mat compression when a load is applied to the top surface. Any effect on the compressive properties of the mats of Vaux and Taylor provided by

their respective under surface structures are purely random and arbitrary.

Both Vaux and Taylor lack a second set of legs for supporting the mat base on a floor and modifying the resiliency of the mat. Even if either did have a set of second legs, that set of second legs would not be adapted to provide a selected mat compression when a load is applied to the top surface of the mat such that the mat compresses as if it were constructed from a softer material. Any structure of Vaux or Taylor capable of modifying mat resiliency could only do so on a coincidental or random basis. Thus, applicant's limitations of "adapted to provide a selected mat compression" and "such that the mat compresses as it were constructed from a softer material" could not be and are not satisfied by Vaux or Taylor.

Claims 2 and 12 are dependent upon claim 1. Claims 2 and 12 should be allowed because claim 1 is allowable. Claim 17 is also dependent upon claim 1. Claim 17 was not addressed within the pending office action. It provides limitations regarding the surface area of the mat and the number of long legs and short legs of the mat which are not disclosed by Vaux or Taylor.

Claim 1 was also rejected under 35 USC 102(b) as being anticipated by Taylor (US patent number 2,810,672). The examiner stated:

Taylor discloses a mat (title) comprising a mat base having a top surface and a bottom surface, a plurality of long legs (column 2, line 72) perpendicularly attached to the bottom surface of the mat base which is deemed to be for resiliently supporting the mat base and a plurality of short legs (column 3, line 1) attached to the bottom surface of the mat base deemed to be for supporting the mat

base and modifying the resiliency of the mat. Also, the long legs and the short legs are deemed capable of providing a selected mat compression when a load is applied to the top surface of the mat, since the mat comprises the claimed long and short legs.

Taylor discloses a combination of a bottom mat and a cover mat. The cover mat fits on top of the bottom mat. The bottom mat has upstanding ribs 11 (Figure 3). The cover mat has nibs 15 (Figure 3). A review of column 2, line 69 through column 3, line 10 shows that the ribs and nibs are shaped and positioned to prevent relative shifting of the cover mat with respect to the bottom mat. Neither mat alone has structures which may be considered long legs and short legs. Selected mat compression is not the purpose or the result of the ribs and nibs of Taylor.

The office action states that "the long legs and the short legs are deemed capable of providing a selected mat compression when a load is applied to the top surface of the mat, since the mat comprises the claimed long and short legs." Applicant's claim 1 states that the long legs and the short legs are adapted to provide a selected mat compression when a load is applied to the top surface of the mat such that the mat compresses as if it were constructed from a softer material. The coordination between applicant's long legs and short legs is intended to provide a selected mat compression and to make the mat feel as if it were constructed from a softer material. The structures in Taylor are not adapted to provide a selected mat compression and do not make the mat feel as if it were constructed from a softer material.

Taylor discloses two mats – a bottom mat and a cover mat. Applicant claims one mat. The alleged legs of Taylor are found on two separate mats. One set of alleged legs (upstanding ribs) points up, while another set of alleged legs (nibs) points down. The nibs and ribs of Taylor

do not mate at a floor surface. They have a serrated appearance. Applicant's claim 1 has been amended to clarify that the long legs and the short legs are for resiliently supporting the mat base on a floor. This also significantly differentiates applicant from Taylor because the ribs and nibs of Taylor do not rest upon, contact or potentially contact a floor.

Another difference between applicant's claim 1 and Taylor relates to the leg attachment. In applicant's claim 1 the long legs and the short legs attach to the bottom surface of a single mat base. In Taylor the ribs attach to one mat surface, while the nibs attached to a second mat surface. The ribs and nibs of Taylor attached to different surfaces or mats. Applicant's claim 1 legs attach to the same mat base.

Claims 3 and 18 were rejected under 35 USC 102(b) as being anticipated by Rope et al. (US patent number 5,527,128).

The examiner stated:

Rope discloses a mat (ground cover, title) comprising a mat base having a top surface and a bottom surface and a plurality of channels subdividing the mat top surface into mat segments (figure 2), wherein each said channel has a floor and a lateral wall surface and wherein the lateral wall surface has a drain opening permitting drainage from the top surface of the mat to below the bottom surface of the mat (figure 3). The top surface of the mat is deemed to cover the drain opening (figure 3).

The limitations of claim 18 have been added to claim 3. Claim 18 has been canceled. Claim 3 has been amended as follows:

3. (Currently amended) A flexible rubber mat comprising:
- (a) a mat base having a top surface and a bottom surface; and
 - (b) a plurality of channels subdividing the mat top surface into mat segments, wherein each said channel has a floor and a lateral wall surface, ~~and~~ wherein ~~the~~ at least one lateral wall surface has a drain opening positioned upon the lateral wall surface, rather than being horizontally oriented, permitting drainage from the top surface of the mat to below the bottom surface of the mat and wherein the top surface of the mat covers the drain opening.

Rope is not a flexible rubber mat.

Claim 3 contains the following limitations: "a plurality of channels subdividing the mat top surface into mat segments, wherein each said channel has a floor and a lateral wall surface, wherein at least one lateral wall surface has a drain opening positioned upon the lateral wall surface, rather than being horizontally oriented, permitting drainage from the top surface of the mat to below the bottom surface of the mat and wherein the top surface of the mat covers the drain opening." The alleged drain opening of Rope is said to appear within Figure 3. The examiner referenced structure of Figure 3 appears on the perimeter of the ground covering. Applicant's drain openings appear within the interior of the mat, to be distinguished from the perimeter. Please refer to Figure 6 of applicant's drawings. There, drain openings 58 are shown upon the lateral walls 56 of the channels 52. Applicant's drain openings 58 appear upon the lateral wall surfaces of channels which subdivide the mat top surface into mat segments. Claim 3 refers to a lateral drain opening positioned upon a lateral wall surface which is a part of a channel subdividing the mat surface into mat segments. Although Rope does have channels subdividing

the top surface of his ground covering into ground covering segments (Figure 1), those channels have no lateral wall surface drain openings. Instead, the alleged drain opening of Rope appears upon the perimeter of the ground covering.

Figure 3 of Rope does not disclose a lateral wall surface drain opening. Even if it did, the top surface of the ground covering does not cover the drain opening. Additionally, in use, the tabs 32 of Rope would plug the structure of Rope thought to be a drain opening, thereby preventing it from functioning as a drain opening. Applicant has been unable to find any reference to a drain opening within the specification of Rope.

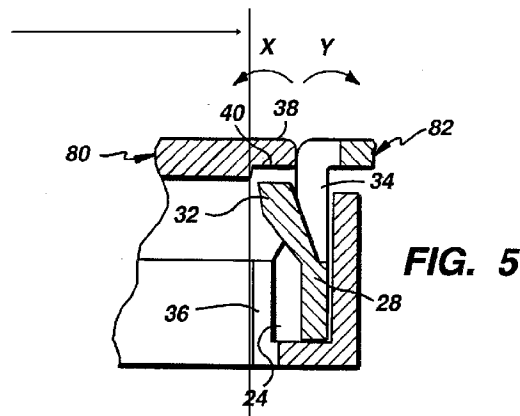
Applicant suggests that Figure 3 of Rope does not show a drain opening. The problem is attributable to Rope's use of the term cut out when referring to the structure identified by reference number 36 in his Figure 1. The term "cut out" suggests the possibility of a hole allowing drainage, but this is belied by the figures themselves. Compare the edge channel 24 shown in Figure 3 of Rope with that shown in Figure 1 of Rope. The edge channel 24 is a generally U-shaped channel with deviations occurring at the cut outs 36. The cut outs 36 are actually tunnels transversely extending from the ground covering proximal side of the channel 24 to the distal side of the channel 24. The proximal side of the tunnel is actually blocked by the proximal side of the edge channel 24. There is no evidence indicating that the proximal side of the tunnel penetrates the edge channel 24 surface. Without such penetration no drain opening exists.

This analysis can be better appreciated by referring to Rosan (US patent number 5,833,386). The Rosan drawings and the Rope drawings appear to disclose substantially similar structures. Figure 1 of Rosan appears to be copied from Figure 1 of Rope. Similarly, Figure 5A

of Rosan appears to be a slightly modified copy of Figure 2 of Rope. The similarities with respect to the cut outs 36 (Figure 1 of Rosan and Figure 1 of Rope) and the edge channels 24 (Figure 5A of Rosan and Figure 2 of Rope) indicate that, at least with respect to the cut outs 36, the Rosan and Rope structures are the same. Even the reference numbers for the cut outs (36) and the edge channels (24) are the same. The advantage of this conclusion is that the cut out 36 of Rosan Figure 1 can be more easily analyzed than the cut out 36 of Rope Figure 1. Figure 1 of Rosan is a perspective view, while Figure 1 of Rope is a top plan view. The perspective view more clearly shows that the cut out 36 is not a drain opening. Rather, the cut out 36 is a tunnel projecting from the proximal side of the edge channel 24. The distal side of the tunnel is open, but the proximal side is closed by the wall of the edge channel.

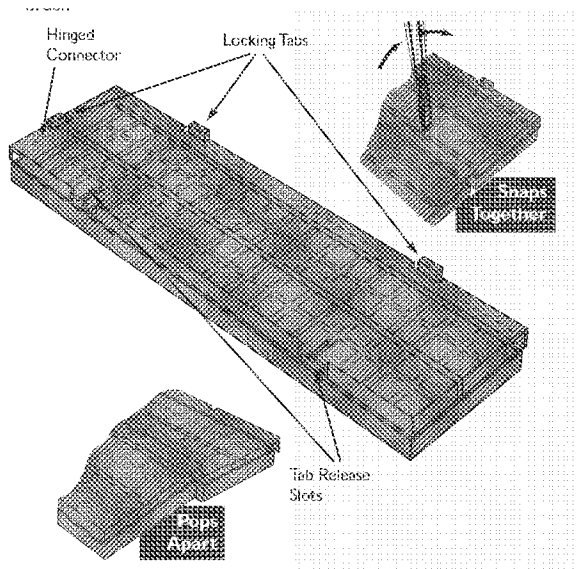
This comparison of the Rosan drawings with the Rope drawings permits an easier understanding of the fact that the Rope cut out 36 is not a drain opening, even if Figure 1 of Rosan is ignored. It should now be clear from Figure 3 and Figure 5 of Rope that the projection 38 is actually the top of the tunnel and that that projection 38 starts at the proximal vertical wall surface of the edge channel 24. In other words, any drain opening in the proximal wall of the edge channel 24 would be to the left of the projections 38 shown in Figure 3 and Figure 5 of Rope. The examiner has apparently relied upon the object pointed to by reference number 36 of Rope as a drain opening. This cannot be a drain opening because it does not appear to the left of the projection 38. Roughly speaking, the vertical line which is crossed by the reference number 36 lead line in Figure 5 of Rope coincides with the outer surface of the proximal wall of the edge channel 24. There must be a penetration in this proximal wall for there to be a drain opening as initially thought by the examiner. Claim 3 should be allowed because no drain opening is shown

The location of the proximal wall of the edge channel 24 of Rope is shown below. This is a copy of Rope's Figure 5 with the addition of a vertical line indicating the location of the proximal wall of the edge channel. Any drain opening must penetrate this proximal wall. There is no indication of any such penetration within Rope.



The Rope patent has been assigned to Portapath International Ltd. A picture of the Portapath product can be found at www.eventsystems.co.uk. This picture shows that the cut out 36 of the product is actually the same as that shown in Figure 1 of Rosan. This confirms that the cut out 36 of Rope is a blocked projecting tunnel incapable of drainage, as described above.

Here is a drawing of the Portapath product. The cut outs (projecting tunnels) and screwdriver slots are the same as, and consistent with, Rosan and Rope. This drawing should assist in understanding applicant's argument that the Rope cut outs are not drain openings and do not penetrate the proximal edge channel wall surface.



There is also a screwdriver slot (78 Rope, 38 Rosan) within the top surface of the cut out 36. Figure 8 of Rosan shows how this slot is used to force the tabs out of the cut outs. The significance of this screwdriver slot is that if the cut out 36 were erroneously interpreted to be a drain opening, that drain opening would not be covered by the top surface of the mat. One of the limitations of applicant's claim 3 is that the top surface of the mat covers the drain opening.

Claim 3 should be allowed.

Claim 4 was rejected under 35 USC 102(b) as being anticipated by Van der Pyl (US patent number 1,619,773). The examiner stated:

Van der Pyl discloses a mat comprising a mat base having a top surface and a bottom surface, a plurality of grit trenches embedded within the top surface of the mat, wherein each grit trench has two ends and each end has a retention lip forming a dam for retaining

adhesive and grit and grit bonded into the trenches by an adhesive.

Claim 4 has been amended as follows:

4. (Currently amended) A flexible rubber mat comprising:
- (a) a mat base having a top surface and a bottom surface;
 - (b) a plurality of channels subdividing the mat top surface into mat segments;
 - (c) a plurality of grit trenches embedded within the top surface of the mat, ~~wherein each said grit trench has two open ends and each said end is bounded by a retention lip forming a dam for retaining adhesive and grit; and~~
 - (d) grit bonded into the trenches by an adhesive.

Additionally, new claims 19 and 20 have been added. Claims 19 and 20 are as follows:

19. (New) The mat of claim 4, wherein each said grit trench has two open ends, each said end terminating at a channel and each said end being bounded by a retention lip forming a dam for retaining adhesive and grit and for inhibiting adhesive and grit from entering into a channel.
20. (New) The mat of claim 19, further comprising at least one opening between the retention lip and a wall of the channel.

Van der Pyl does not disclose a flexible rubber mat. Van der Pyl uses blocks of bonded abrasive grains (column 1, line 42) to form a tread unit comprising abrasive tiles fastened to a backing (column 1, lines 18-20). Van der Pyl has no channels subdividing a mat surface into mat segments. Van der Pyl has no trenches embedded within the top surface of a mat. Van der Pyl has no trenches having open ends which terminate at a channel. Van der Pyl has no trenches bounded by a retention lip forming a dam for retaining adhesive and grit and for inhibiting

adhesive and grit from entering into a channel. Van der Pyl has no grit bonded into trenches by an adhesive.

Openings between a retention lip and a channel wall can be seen within applicant's Figure 1, Figure 6, Figure 8 and Figure 9. Claim 20 claims at least one such opening. The opening allows water or other liquids to be drained from the trench which the retention lip bounds. Absent the retention lip, water or other liquids could accumulate within a trench which is not filled with adhesive and grit or which is filled with adhesive and grit, but wherein the adhesive and grit are below the surface plane of the mat. Van der Pyl has no openings between a retention lip and a wall of a channel.

Claims 13 and 14 were rejected under 35 USC 103(a) as being unpatentable over Van der Pyl. Both claims should be allowed because they are dependent claims which depend upon claim 4.

The examiner concluded that "it would have been an obvious matter of design choice to change the shape of the grit trenches, since a modification would have involved a mere change in size of the grit trench." While this reasoning may apply to claim 14, it does not apply to claim 13. In claim 13 at least one grit trench is supported by legs perpendicularly attached to the bottom surface of the mat for reducing flexure within the trench. Grit bonded into the trenches with an adhesive can become hard and brittle. Hard and brittle grit bonded into trenches with an adhesive can easily break when flexed. To prevent this claim 13 provides support under the trench. The support inhibits flexing and thereby inhibits breaking of the grit and adhesive. Nothing in Van der Pyl suggests supporting a grit trench with legs. Neither was such an argument made or supported by the examiner. Thus claim 13 is independently allowable.

Claims 8-11 are process claims. They were previously withdrawn after a restriction requirement. They have been currently amended to include limitations of related allowable product claims. Reconsideration and allowance of claims 8-11 is requested.

EXAMINER INTERVIEWS

On August 29, 2006 a telephone interview was conducted between the examiner and applicant's attorney. The primary focus of the interview was upon claims 1, 3 and 4. No demonstrations were conducted and no exhibits were reviewed. No agreement regarding allowance of claims was reached. The purpose of the use of combined long legs and short legs by the applicant was discussed. This purpose included the objective of fabricating a flexible rubber mat from hard rubber such that it compresses as if it were constructed from a softer material. The examiner acknowledged that limiting the mat to a flexible rubber mat and limiting claims to indicate that the mat compresses as if it were constructed from a softer material would eliminate a significant part of the referenced prior art. A discussion also took place regarding applicant's contention that Rope does not disclose a drain opening in a lateral wall surface as claimed by applicant. The examiner recognized that this contention may have merit. The interview participants also discussed applicant's contention that Van der Pyl does not disclose the invention claimed by applicant within claim 4. It was discussed that limiting claim 4 to a flexible rubber mat may lead to allowance of that claim. Applicant offered to provide the examiner with a proposed set of claims and requested a short follow-up interview.

On September 7, 2006 that short follow-up interview was conducted between the examiner and applicant's attorney. A proposed set of claims had previously been provided to the examiner. A short conversation took place. The interpretation of this conversation by applicant's

attorney was that the examiner was optimistic that all of the proposed claims would be allowed in light of the previously cited prior art. It was also discussed that the previously withdrawn process claims (8-11) may be allowable if each such process claim is amended to contain the limitations of an allowed product claim. Applicant's attorney indicated that he would amend claims 8-11 and seek allowance of those claims.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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